UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 12b-25

NOTIFICATION OF LATE FILING

| OMB | APPROVAL |
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| | |

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SEC FILE NUMBER 001-35932

CUSIP NUMBER

| (Check o | one): □ Form10 K ⊠ Form 20-F □ Form 11-K □ Form 10-Q □ Form 10-D □ Form N-SAR □ Form N-CSR | | | |
|-----------------------------|---|--|--|--|
| | For Period Ended: December 31, 2017 Transition Report on Form 10-K Transition Report on Form 20-F Transition Report on Form 11-K Transition Report on Form 10-Q Transition Report on Form N-SAR For the Transition Period Ended: | | | |
| | Read Instruction (on back page) Before Preparing Form. Please Print or Type. Nothing in this form shall be construed to imply that the Commission has verified any information contained herein. | | | |
| If the no | tification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates: | | | |
| PART I | — REGISTRANT INFORMATION | | | |
| | Therapeutics Ltd. | | | |
| Full Nar | ne of Registrant | | | |
| Alcobra | | | | |
| Former 1 | Name if Applicable | | | |
| | cience Center Drive, Suite 250 | | | |
| Address | of Principal Executive Office (Street and Number) | | | |
| San Diego, California 92121 | | | | |
| City, Sta | te and Zip Code | | | |
| PART I | I — RULES 12b-25(b) AND (c) | | | |
| | bject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should leted. (Check box if appropriate) | | | |
| X | (a) The reason described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q or subject distribution report on Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and | | | |

PART III — NARRATIVE

(c)

State below in reasonable detail why Forms 10-K, 20-F, 11-K, 10-Q,10-D, N-SAR, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

Arcturus Therapeutics Ltd. (the "Company") is unable to timely file its Annual Report on Form 20-F for the year ended December 31, 2017 (the "2017 Form 20-F") in a timely manner without unreasonable effort and expense as a result of the completion of a merger transaction on November 15, 2017 with Arcturus Therapeutics, Inc. From an accounting perspective, Arcturus Therapeutics, Inc. was deemed the accounting acquirer in the transaction, and the Company was the deemed the accounting acquiree. Accordingly, the Company's financial statements will reflect Arcturus Therapeutics, Inc.'s financial statements up to November 15, 2017, and the combined financial statements for the period subsequent to November 15, 2017. In light of the complexities involved in this transaction, the Company requires additional time to complete its consolidated financial statements for the fiscal year ended December 31, 2017.

The Company anticipates that the 2017 Form 20-F will be filed on or before the fifteenth calendar day following the prescribed due date for the 2017 Form 20-F.

PART IV — OTHER INFORMATION

| Mark Herbert | (858) | 900-2660 |
|--------------|--|--|
| (Name) | (Area Code) | (Telephone Number) |
| (2) II11 -41 | Continue 12 on 15(1) of the Committee Eurobana Act | of 1024 on Continue 20 of the Investment Community |

- (2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is no, identify report(s). Yes ⊠ No □
- (3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof ? Yes □ No ☒

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

Forward Looking Statements

Except for the historical statements contained herein, this notification includes forward-looking statements within the meaning of Section 21E of the Exchange Act of 1934, including statements regarding the estimated timing for the filing of the Company's Form 20-F. Actual results could differ materially from these forward-looking statements as a result of certain factors, including, without limitation: the Company's inability to complete the work required to file the Form 20-F in the timeframe that is anticipated; risks related to the Company's ability to finalize the financial statements to be included in the Form 20-F, including those related to the need to complete the Company's internal review and the performance of the requisite procedures by its independent registered public accounting firm; as well as other risks detailed in the Company's filings with the Securities and Exchange Commission, including under the heading "Risk Factors" in the Company's Annual Report on Form 20-F for the fiscal year ended December 31, 2016, filed with the Securities and Exchange Commission on April 28, 2017 and in subsequent filings with, or submissions to, the Securities and Exchange Commission. The Company disclaims any obligation or undertaking to update or revise any forward-looking statements contained in this notification.

Arcturus Therapeutics Ltd. (Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Name and telephone number of person to contact in regard to this notification

Date April 27, 2018 By: /s/ Mark Herbert

INSTRUCTION: The form may be signed by an executive officer of the registrant or by any other duly authorized representative. The name and title of the person signing the form shall be typed or printed beneath the signature. If the statement is signed on behalf of the registrant by an authorized representative (other than an executive officer), evidence of the representative's authority to sign on behalf of the registrant shall be filed with the form.